

WHAT IS CLAIMED IS:

1. A sprinkling device, particularly for processes for making wine from red grapes, which device can be associated with a fermentation and/or storage tank in order to recirculate the wine must that is being fermented from the base region to the top region of the fermentation tank and to sprinkle the recirculated wine must in a stream into the top region of the fermentation tank, said sprinkling device comprising:

- an auxiliary tank which can be fitted in a hatch or similar top opening of a main tank and which is provided with means for fixing to the hatch,

- first discharge means for the discharge of the wine must that is supplied to the auxiliary tank from the main tank, which means comprise an opening in the base of the auxiliary tank and a closure member which is movable between a closure position and an open position in order to produce a first sprinkling stream of the recirculated wine must, and

- second discharge means for the discharge of the wine must, which means are associated with the closure member and can discharge the wine must by means of a second sprinkling stream when the level of recirculated wine must in the auxiliary tank reaches a predetermined level.

2. A sprinkling device according to Claim 1, wherein the second discharge means comprise an auxiliary discharge opening in the closure member and an overflow duct communicating with the opening in order to deliver the recirculated wine must through the auxiliary opening.

3. A sprinkling device according to Claim 1, wherein the second discharge means comprise a diffuser member which is associated with the auxiliary opening and which can interfere with the sprinkling stream coming from the opening in order to modify the shape of the stream.
4. A sprinkling device according to Claim 3, wherein the diffuser member comprises a member with a conical surface associated with the closure member beneath the auxiliary opening.
5. A sprinkling device according to Claim 3, wherein the diffuser member comprises an inclined plate, associated with the closure member beneath the auxiliary opening and suitable for producing a directional sprinkling stream.
6. A sprinkling device according to Claim 1, wherein said auxiliary tank comprises associated supply means for the recirculated wine must, the supply means being connectible to a recirculation duct which draws off the wine must from the main tank with which the device is associated.
7. A sprinkling device according to Claim 6, wherein said supply means comprise a supply duct connectable to said recirculation duct, having one or more end nozzles suitable to supply one or more streams of recirculated wine must with a jet(s) oriented according to pre-determined directions through the base opening of the tank, when the closure member is open.
8. A sprinkling device according to Claim 6, wherein the supply means comprise three-way valve means with an inlet connector connectible to the recirculation duct, a first outlet duct which supplies the recirculated wine must into the auxiliary tank through the valve means, and a second

outlet duct which is arranged to be connected to a duct for supplying the recirculated wine must to the main tank, the valve means being arranged to supply the recirculated wine must selectively to the first outlet duct or to the second outlet duct.

9. A sprinkling device according to Claim 8, comprising oxygenation means, associated with the first outlet duct and/or with the second outlet duct, for oxygenating the recirculated wine must.

10. A sprinkling device according to Claim 9, wherein the oxygenation means comprise air-injection means.

11. A sprinkling device according to Claim 1, wherein the first discharge means can be operated in order to modulate the head of wine must in the tank in order to determine the width and characteristics of the sprinkling stream.

12. A sprinkling device according to Claim 11, wherein the first discharge means are actuated by an electric actuator.

13. A sprinkling device according to Claim 1, wherein the first discharge means comprise a plate-like closure member having, on the side facing towards the interior of the auxiliary tank, an inclined wall suitable for producing an asymmetric, directional sprinkling stream through the base opening of the auxiliary tank.

14. A sprinkling device according to Claim 1, wherein the first discharge means comprise a plate-like closure member articulated laterally to the wall delimiting the base opening and a rod-like operating member which can bring about inclined angular opening of the closure member in order to produce an asymmetric, directional sprinkling stream.

15. A sprinkling device according to Claim 1, wherein the first discharge means comprise a plate-like closure member connected to an operating rod, the plate having a peripheral profile which projects asymmetrically beyond the peripheral profile of the base opening in order to produce an asymmetric, directional sprinkling stream.

16. A sprinkling device according to Claim 1, wherein said first discharge means comprise a base opening of said auxiliary tank having a mouth profile lying in an inclined plane with respect to the vertical and a plate closure member connected to an operating rod which can be inclined with respect to the vertical.

17. Fermentation apparatus comprising a main tank or vat and a sprinkling device according to Claim 1, associated with a hatch or similar top opening of the fermentation tank or vat.

18. Fermentation apparatus according to Claim 17, wherein said fermentation tank or vat has a hatch or similar top opening positioned in an asymmetric position.

19. Fermentation apparatus according to Claim 17 or Claim 18, comprising recirculation means which are arranged to draw off the wine must from the base region of the main fermentation tank or vat and to supply the wine must into the sprinkling device.

20. Fermentation apparatus according to Claim 19, wherein the recirculation means comprise pumping means arranged to supply to the sprinkling device a recirculation flow rate such as to produce the second sprinkling stream through the second discharge means even when the first discharge means are in the open position.